

Saudi mothers' awareness and first aid management of unintentional injuries to children in the home 2021

To Cite:

Ghmaid A, Alabdullah W, Alquayr S, Alhejaili M, Alshomrani S, Alsofyani N. Saudi mothers' awareness and first aid management of unintentional injuries to children in the home 2021. Medical Science, 2021, 25(117), 3054-3063

Author Affiliation:

¹Assistant professor and consultant in pediatric, College of Medicine, Tabuk university, Saudi Arabia

²Pediatric resident, King AbdulAziz National Guard hospital, Alhasa, Saudi Arabia

³Fifth year medical student, College of Medicine, Tabuk University, Saudi Arabia

⁴Medical intern, College of Medicine, Hail University, Saudi Arabia

⁵Medical intern, Ibn Sina Medical College, Jeddah, Saudi Arabia

⁶Nursing intern, College of Applied Medical Science, Taif University, Saudi Arabia

Contact Information

Asmaa Ghmaid:	dr_samanor@yahoo.com
Walaa Alabdullah:	Walaahmed1417@gmail.com
Sarah Alquayr:	Sarahmagedalquayr@yahoo.com
Maram Alhejaili:	Maramabdulaziza997@gmail.com
Sultan Alshmrani:	Sultanalshmrani586@gmail.com
Nouf Alsofyani:	Nhresearch88@gmail.com

Corresponding author

Pediatric resident, King AbdulAziz Hospital, Alhasa, Saudi Arabia
Email: Walaahmed1417@gmail.com

Peer-Review History

Received: 06 October 2021

Reviewed & Revised: 08/October/2021 to 13/November/2021

Accepted: 14 November 2021

Published: November 2021

Peer-review Method

External peer-review was done through double-blind method.

Asmaa Ghmaid¹, Walaa Alabdullah², Sarah Alquayr³, Maram Alhejaili⁴, Sultan Alshomrani⁵, Nouf Alsofyani⁶

ABSTRACT

Background: Unintentional injuries in children are regarded as a major public health concern since they are one of the primary causes of pediatric death and morbidity. The majority of these injuries happen at home, and many of them are preventable. **Objective:** To evaluate the level of mothers knowledge regarding home accidents and safety measures and assess their skills in First Aid. **Methodology:** A cross sectional questionnaire based study was done to evaluate the knowledge of mother toward first aids and prevention of common home accidents among children under five years, to identify the most common home accident take place, to determine the risk factors and measure the association between factors contributed to home accident. **Results:** The study included 740 mothers. Finding revealed that most of mothers were in between age (31-40). Otherwise (46.8%) of mothers had more than 3 children. (39.2%) of the mothers had good knowledge regarding measures to prevent home accidents. While (48.5%) of children had a falling accident. (52%) of mothers had a good knowledge of how to prevent injuries at home. (93.8%) of mother has good knowledge. While the mothers regarding prevention of burns. Good knowledge in (63.2%) regarding choking first aid, and (89.6%) regarding poisoning prevention. (91.6%) of mothers are willing to take course about first aid. **Conclusion:** Overall mother's knowledge about home injury prevention and first aids is poor. The present study highlights the need of increasing mother's awareness regarding home accidents through campaigns and social media.

Keywords: Home injury, Children, Saudi Arabia, First aid.

1. INTRODUCTION

Injuries are one of the major causes of mortality all across the world in children. In many countries it is the main cause of death for children after their first birthday. Childhood injuries are also connected with a high rate of morbidity: For every injured child who dies, there are thousands of children who live with varying degrees of disabilities (WHO, 2021). Child safety wellbeing stays a significant concern of guardians nowadays (Nadeeya et al.,



2016). The importance of the role of mothers in preventing childhood injuries has been recognized for a long time, although many studies showed that many mothers are unsure of this role, feel underprepared, and recognize significant constraints on injury prevention activities. The Health nation suggested that mothers should undertake specific injury prevention activities to insure children safety. Home injuries are number one cause of death and a major cause of death Cause of infant and toddler hospitalization (Okonyand Helen Achwany, 2017). Before medical help arrives, first aid is the provision of immediate care for an illness or accident by someone who is not a practitioner but is qualified. The provision of immediate first aid to patients requiring emergency care can make a big difference to the survivance rate (Okonyand Helen Achwany, 2017). Parents' first-aid knowledge and practice are especially important in child injury care since many harmful consequences of the accident can be avoided if parents know what to do (Eldosoky et al., 2012).

Injuries are a serious public health issue that kills 5 million people each year around the world. Among the others, unintentional injury accounts for over 80% of injury deaths (3.9 million deaths) (WHO, 2008). It has found that the most common type of accidental injuries reported in Saudi Arabia were falls (50.9 percent), while the most frequently reported were the typical location for these injuries at home (66 %). Parents also confirmed that because of the injuries (28.7 %) most children suffered from contusion and abrasion (Al-Zahrany et al., 2018).

In 2016, a study was conducted on Malaysian urban mothers' knowledge and perceptions of home injury in children and safety measures, and the study found that mothers had low understanding on a few key knowledge items. Only 20.2 percent of mothers agree to know cardiopulmonary resuscitation for children, according to this survey. About 24.0 percent correctly identified the use of a baby walker, 27.2 percent correctly identified the potential for vitamins to cause child poisoning at home, 34.8 percent correctly identified the appropriate age for children to bathe alone, 47.8 percent correctly identified the use of a hammock, and 48.2 percent correctly identified the danger of having electrical sockets exposed (Nadeeya et al., 2016). Another study done by Santagati et al., (2017) shows that falls were the primary cause of home injuries and just 9.2 % were taken to the emergency room for treatment. Parents who did not believe that unintended injury can be prevented were more likely to have had a child injured. About 70 % of respondents were aware of protective programs to prevent childhood injuries, and this knowledge has been more prevalent in older parents and those with at least a college-level education compared to those with middle school education.

Another study done by İnce et al., (2017) shows that; at least one major injury occurred in 13.8 percent of participating children. Though information about injury prevention had been received by three-quarters of parents, injury prevention scores were found to be low overall. The parents' total scores for injury prevention declined dramatically as their children's ages increased. Life cannot be risk-free, but by using home protection measures, most home injury can be prevented. Child protection is one of the mother's responsibilities (Debnath et al., 2014). According to Ibrahim (1994) and John (1999), where preventive steps are taken to prevent injuries, 40% of deaths from domestic injuries are preventable. It is critical to consider how mother's knowledge and understand of home injury and safety precautions can assist their children in surviving (Olutayo and Oladunjoye Grace, 2013). We conduct this research considering the fact that the experience and quality of life during childhood has been introduced as one of the social determinants of health and regarding the outstanding role of mothers in preventing injuries in the children and regarding their knowledge about first aid measures. We found insignificant number of researches related to this topic in Saudi Arabia, a gap that this study set out to fill.

Objective

Primary objective

To explore the knowledge and perception among mothers in Saudi Arabia to unintentional home-related injuries in children including Poisoning, asphyxia, fractures and bruises and how they dealing with it

Secondary objective

To investigate mothers' attitudes to preventive measures, and assess their skills in First Aid and CPR, and their adherence to these skills and measures

2. METHODOLOGY

Study design

This study is a cross-sectional questionnaire online survey, based on a structured questionnaire that was developed by Okony, (2017). It will be carried out from August to September 2020 that will be conducted among Saudi mothers. The study population consisted of 740 participants (mothers) with at least one child under 7 years in kingdom of Saudi Arabia. The data will be collected

between October - December 2020 through online.

Subject

Participants, recruitment and sampling procedure

Inclusion criteria

Mother of children age: newborn to 7 years

Saudi mothers

Agree to Participate

Exclusion criteria

Mother of children older than 7 years

Non Saudi mothers

Sample size

The sample size was estimated using the Qualtrics calculator with a confidence level of 95%; a sample size of 385

Method for data collection and instrument

A structured questionnaire will be used as study tool. This tool developed based on a structured questionnaire that developed by Okony, H. This Study conducted in Saudi Arabia and the final form of the questionnaire had 32 questions divided into two sections. First section contained socioeconomic background characteristics questions. The knowledge and perception of various home injuries and first aid management are covered in the second section. Data will be collected by medical students through online survey.

Analyzes and entry method

Data will be entered on the computer using the "Microsoft Office Excel Software" program (2016) for windows. Data then will be transferred to the Statistical Package of Social Science Software (SPSS) program, version 20 (IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp.) to be statistically analyzed.

Data collection and Statistical data analysis

After the data was extracted, it was reviewed, coded, and fed into the IBM SPSS version 22 statistical program (SPSS, Inc. Chicago, IL). Two-tailed tests were used for all statistical analysis. A statistically significant P value was less than 0.05. Each correct response was given one point for knowledge items, and the cumulative sum of the discrete scores for the various things was determined. A mother with score less than 60% of the maximum score (correct choices) was considered to have poor knowledge while good knowledge was considered if he had score of 60% of the maximum or more. All variables, including demographic data, childcare, history of home accidents, knowledge items, mothers' attitude, and source of mothers' information regarding home accidents, were subjected to descriptive analysis based on frequency and percent distribution. Cross tabulation was used to test for distribution of mothers' knowledge level according to their socio-demographic data. Relations were tested using Pearson chi-square test.

3. RESULTS

The study included 740 mothers who completed the questionnaire. Mother's ages ranged from 18 to 50 years old with mean age of 32.5 ± 10.7 years. Exact of 244 (33%) mothers were from Western region, followed by North region (22.8%; 169), and Southern region (18.9%; 140). As for mother education, 502 (67.8%) were university graduated. Exact of 346 (46.8%) mothers had more than 3 children while 344 (46.7%) had only one child aged 3-7 years. Married mothers were 693 (93.6%) and 423 (57.2%) were housewives. Monthly income of more than 10000 SR was reported among 336 (45.4%) mothers' families (table 1).

Table 1 Socio-demographic data of respondents' mothers, Saudi Arabia

Socio-demographic data		No	%
Region	North region	169	22.8%
	Eastern region	93	12.6%
	Western region	244	33.0%
	Central region	94	12.7%
	Southern region	140	18.9%
Mother age (years)	18-24	87	11.8%
	25-30	214	28.9%
	31-40	279	37.7%
	>40	160	21.6%
Mother education	Below secondary	68	9.2%
	Secondary	170	23.0%
	University /above	502	67.8%
No. of children	1 child	125	16.9%
	2 children	144	19.5%
	3 children	125	16.9%
	> 3 children	346	46.8%
Children aged 3-7 years	1 child	344	46.7%
	2 children	233	31.6%
	3 children	77	10.4%
	> 3 children	83	11.3%
Marital status	Married	693	93.6%
	Divorced/ widow	47	6.4%
Residence	Urban	628	84.9%
	Rural	112	15.1%
Mother work	Housewife	423	57.2%
	Non health care sector	259	35.0%
	Health care sector	58	7.8%
Monthly income	< 5000 SR	110	14.9%
	5000-10000 SR	294	39.7%
	> 10000 SR	336	45.4%

Table 2 illustrates childcare and history of home accidents for children as reported by study mothers. Exact of 973 (90.9%) of the mother were the care giver for their young children and housekeeper was reported by 45 (6.1%) mothers. History of child had any type of accident was reported by 472 (63.8%) mothers and the most reported types of accidents were fall (48.5%) followed by injury (44.9%), burn (35.4%), and fracture (18.2%). As for known places for home accidents, 89.1% of the mothers reported for kitchen, 33.2% reported for bathroom, 28.1% reported for garden while only 14.1% reported for the rooms.

Table 2 Childcare and history of home accidents for children as reported by study mothers, Saudi Arabia.

History of home accident	No	%
Who is caring for the child		
<i>Mother</i>	673	90.9%
<i>Family member/ relative</i>	22	3.0%
<i>Housekeeper</i>	45	6.1%
Did your child had any type of		

accident?		
Yes	472	63.8%
No	268	36.2%
Type of home accident		
Fall	229	48.5%
Injury	212	44.9%
Burn	167	35.4%
Fracture	86	18.2%
Poisoning	35	7.4%
Asphyxia	68	14.4%
Others	10	2.1%
Most reported places for home injuries		
Kitchen	659	89.1%
Rooms	104	14.1%
Bathroom	246	33.2%
Garden	208	28.1%
Others	14	1.9%

Table 3 Mothers knowledge regarding home accidents by domain, Saudi Arabia

Domain	Items	No	%
General	Risk factors of home accident	Leave dangerous things within the reach of children	246 33.2%
		Lack of supervision of children	141 19.1%
		Children are not aware of the dangers	243 32.8%
		Neglect of parents	110 14.9%
	Preventions of home accident	Poor knowledge	497 67.2%
		Good knowledge	243 32.8%
Poisoning	Causes of poisoning	Poor knowledge	171 23.1%
		Good knowledge	569 76.9%
	Signs and symptoms of poisoning	Poor knowledge	321 43.4%
		Good knowledge	419 56.6%
	Poisoning management	Poor knowledge	381 51.5%
		Good knowledge	359 48.5%
	Poisoning preventive measures	Poor knowledge	77 10.4%
		Good knowledge	663 89.6%
Burn	Causes of burn	Poor knowledge	4 .5%
		Good knowledge	736 99.5%
	Burn first aid	Poor knowledge	656 88.6%
		Good knowledge	84 11.4%
	Burns preventive measures	Poor knowledge	46 6.2%
		Good knowledge	694 93.8%
Falling	Causes of falling	Poor knowledge	442 59.7%
		Good knowledge	298 40.3%

	Falling prevention	Poor knowledge	355	48.0%
		Good knowledge	385	52.0%
Cuts	Cuts and bleeding first aid	Poor knowledge	332	44.9%
		Good knowledge	408	55.1%
Choking	Causes of choking	Poor knowledge	425	57.4%
		Good knowledge	315	42.6%
	Signs and symptoms of choking	Poor knowledge	56	7.6%
		Good knowledge	684	92.4%
	Choking first aid	Poor knowledge	272	36.8%
		Good knowledge	468	63.2%
	Choking prevention	Poor knowledge	396	53.5%
		Good knowledge	344	46.5%
Overall knowledge level		Poor knowledge	450	60.8%
		Good knowledge	290	39.2%

Table 3 shows mothers' knowledge regarding home accidents by domain. Generally, the most reported risk factors for home accidents by mothers was leaving dangerous things within the reach of children (33.2%) followed by children are not aware of the dangers (32.8%), and lack of supervision of children (19.1%). Exact of 32.8% of the mothers had good knowledge regarding measures to prevent home accidents. As for poisoning, 76.9% of the respondent mothers had good knowledge regarding causes of poisoning, compared to 56.6% for signs and symptoms of poisoning, and 48.5% for poisoning management while 89.6% of the mother had good knowledge regarding poisoning preventive measures. As for burns, 99.5% of the study mothers had good knowledge regarding causes of burn, in comparison to 11.4% for first aid for burns, while 93.8% had good knowledge regarding burns preventive measures. About falling, 40.3% of the mothers had good knowledge regarding causes of falling, while 52% had good knowledge for falling preventing measures. Exact of 55.1% of the responding mothers had good knowledge for cuts and bleeding first aid. Considering choking, 42.6% of the mothers had good knowledge regarding its causes, 92.4% had good knowledge for choking signs and, 63.2% know about first aid at good level and 46.5% had good knowledge for choking prevention. Totally, 290 (39.2%) of the mothers had good knowledge regarding home accidents, first aids, and its preventive measures.

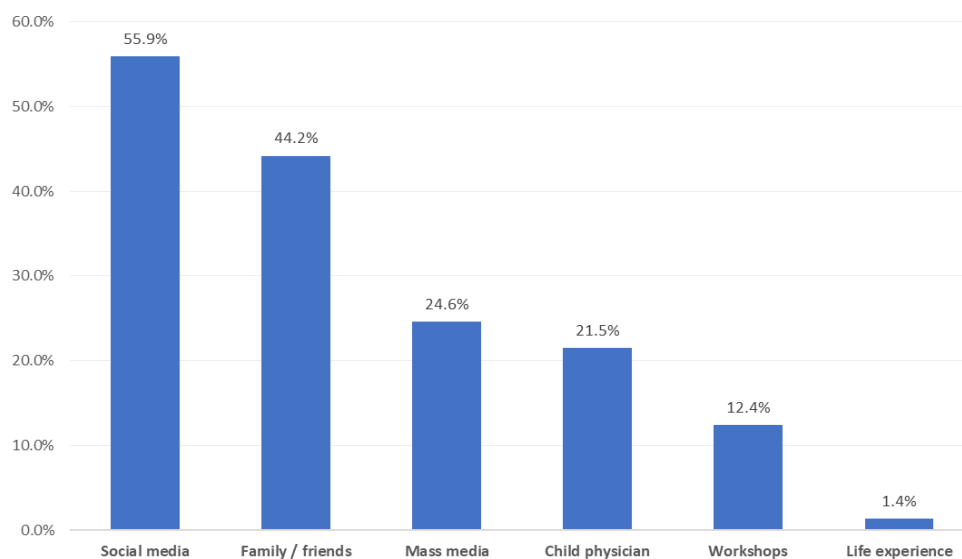


Figure 1 Source of mothers' information regarding home accidents

With regard to source of mothers' information regarding home accidents (figure 1), the most reported source was social media (55.9%) followed by family and friends (44.2%), mass media (24.6%), child physician (21.5%) while the least reported was life

experience (1.4%). Table 4 demonstrates mothers' attitude regarding first aid and child accident management. Exact of 99.1% of the mothers agreed on those mothers with young children should know about first aids in total and 98.1% of the mothers reported that it's important for mothers to learn first aid to deal with children's accidents. Exact of 91.6% of the mother's report of being interested in taking a first aid course.

Table 4 Mothers attitude regarding first aid and child accident management

Mothers attitude	No	%
Mothers with young children should know about first aids in total		
Yes	733	99.1%
No	7	.9%
Mothers should learn first aid to deal with children's accidents		
Yes, important	726	98.1%
No, not important	14	1.9%
Are you interested in taking a first aid course?		
Yes	678	91.6%
No	62	8.4%

Table 5 Distribution of mothers' knowledge regarding home accidents by their socio-demographic data

Factors		Overall knowledge level				P-value
		Poor knowledge		Good knowledge		
		No	%	No	%	
Region	North region	115	68.0%	54	32.0%	.001*
	Eastern region	29	31.2%	64	68.8%	
	Western region	158	64.8%	86	35.2%	
	Central region	49	52.1%	45	47.9%	
	Southern region	99	70.7%	41	29.3%	
Mother age (years)	18-24	44	50.6%	43	49.4%	.158
	25-30	129	60.3%	85	39.7%	
	31-40	173	62.0%	106	38.0%	
	>40	104	65.0%	56	35.0%	
Mother education	Below secondary	50	73.5%	18	26.5%	.016*
	Secondary	111	65.3%	59	34.7%	
	University /above	289	57.6%	213	42.4%	
No. of children	1 child	72	57.6%	53	42.4%	.057
	2 children	77	53.5%	67	46.5%	
	3 children	73	58.4%	52	41.6%	
	> 3 children	228	65.9%	118	34.1%	
Children aged 3-7 years	1 child	214	62.2%	130	37.8%	.066
	2 children	126	54.1%	107	45.9%	
	3 children	52	67.5%	25	32.5%	
	> 3 children	55	66.3%	28	33.7%	
Residence	Urban	369	58.8%	259	41.2%	.007*
	Rural	81	72.3%	31	27.7%	

Mother work	Housewife	263	62.2%	160	37.8%	.001*
	Non health care sector	165	63.7%	94	36.3%	
	Health care sector	22	37.9%	36	62.1%	
Monthly income	< 5000 SR	82	74.5%	28	25.5%	.005*
	5000-10000 SR	175	59.5%	119	40.5%	
	> 10000 SR	193	57.4%	143	42.6%	
Who is caring for the child	Mother	411	61.1%	262	38.9%	.821
	Family member/relative	12	54.5%	10	45.5%	
	Housekeeper	27	60.0%	18	40.0%	
Did your child had any type of accident?	Yes	273	57.8%	199	42.2%	.028*
	No	177	66.0%	91	34.0%	

P: Pearson X² test

** P < 0.05 (significant)*

Table 5 shows distribution of mothers' knowledge regarding home accidents by their socio-demographic data. The highest level of good knowledge was detected among mothers in Eastern region (68.8%) followed by Central region (47.9%), Western region (35.2%), and lowest was among mothers at Southern region (29.3%) with reported statistical significance ($P=.001$). Exact of 42.2% of university graduated mothers had good knowledge level regarding home accidents in comparison to 26.5% of those who had below secondary level of education ($P=.016$). Also, 41.2% of mothers at urban residence had good knowledge level regarding home accidents compared to 27.7% of others from rural area ($P=.007$). Higher rate of good knowledge regarding home accidents was detected among mothers working at the health care field than others (62.1% vs. 36.3%, respectively; $P=.001$). Good knowledge level was also detected among 42.2% of mothers of child had any type of accident in comparison to 34% of those who did not ($P=.028$).

4. DISCUSSION

The current study in Saudi Arabia intends to determine the pattern of home injuries in children, as well as to assess mothers' awareness of home accidents and safety measures, as well as their First Aid and CPR skills. Home injury is one of the most feared aspects of public health around the world, especially among children and the elderly (Eldosoky et al., 2012; Gulliver et al., 2005). Nearly 40% of deaths and 50% of non-fatal accidental injuries occur in and around the home, according to the National Safe Kids Campaign in the United States (National Safe Kids Campaign, 2021). Parents' awareness and safe practice about first aid is vitally crucial in injury care for children, as many adverse outcomes of injuries can be avoided if parents know what actions to take (Ibrahim, 1991).

The current study revealed that most of the respondents were mothers who directly care for the child so, all subsequently given information regarding child fall and injuries will be trusted. Exposure of children to accidents or home injuries was reported by two thirds of the mothers. The most reported accidents where child fall (nearly half of the children who had accidents), injury (less than half of the children), burn (one third of the children), and fractures (nearly one fifth of the children with accident history). Kitchen was the most reported place for home accidents where children usually seek for their findings or follow their mothers during her daytime activity in food preparing. Bathroom was the second most reported site for home injuries among children (due to moisture lands or its environment nature). This estimated rate of home injuries was less than what was reported by Eldosoky et al., (2012). In Egypt, 38.3% had been injured at home in the previous four weeks (57.5 percent were boys). Cut wounds, falls and fractures, burns, poisoning, and foreign body aspiration were among the most prevalent kinds of injuries sustained at home. Also, a lower incidence was reported in India conducted by Mahalakshmy et al., (2011) where among 1613 children under the age of 14 years, the rate of injuries was 23.0%, with more than half of these occurring at home.

Similar findings to the current study were reported into a previous study in Egypt, in Assiut governorate, where the prevalence of home accidents was 50.3% (Abd El-Aty et al., 2005). Another study done by Santagati et al., (2016) estimated that falls were the main cause of home injuries but only 9% were needed emergency intervention. Unintentional injury was more likely to occur in children whose parents did not believe it could be avoided. About 70 % of respondents were aware of protective programs to prevent childhood injuries, and this knowledge has been more prevalent in older parents and those with at least a college-level

education compared to those with middle school education. In Saudi Arabia, Al-Zahrany et al., (2018) assessed that the most frequent type of accidental injuries was falls (51%), while the most frequently reported were the typical location for these injuries at home (66 %). Parents also confirmed that because of the injuries (28.7 %) most children suffered contusion/abrasion.

In terms of mothers' understanding and perceptions of child injury at home and safety measures, the current study found that only one-third of mothers had a good overall awareness level. Burn related awareness was the best among all (exceeded 90%) followed by choking and poisoning related causes and first aids. Around half of the studied mothers had good awareness level regarding falls and cut wounds causes and first aids. Social media was the most reported source of information regarding home injuries followed by family and friends, while physicians and health education sessions (workshops) were at the tail of reported sources.

Awareness was significantly higher among highly educated participants from urban areas and those who work at the health care sector. Also, mothers with previous experience for child accident had higher awareness level regarding first aid and this mostly due to life experience. The surprising was that awareness level was higher among mothers with a smaller number of children. This can be explained by that mothers with one or two children are more careful for their child safety pushing them to ask and know how to avoid and how to deal with these situations. Azizi et al., (1994) conducted a case-control research that revealed that among children admitted for chemical poisoning, there were insufficient safety precautions in place to keep drugs away from kids. In addition, just one-third of mothers knew when their child should be allowed to bathe alone, which is at the age of five.

Other studies showed mothers had different thoughts on the safe age for a child to bathe alone (Spencer et al., 2005; Porter et al., 2007; Mack et al., 2007). Parents should not leave their children under the age of 5 years old alone in the bathroom, according to the American Academy of Pediatrics Committee on Injury, Violence, and Poison Prevention (2003). These findings were comparable to those of Eldosoky et al., (2012) who found that mothers correctly answered 11 out of 29 questions on average (37.9 percent). Mothers who are younger have; a better level of education, have a higher socioeconomic standing and are employed. Another study by Thein et al., (2005) found that primary carers had strong knowledge of road safety but inadequate knowledge of home safety and first aid. The level of education of the mother was one of the most important elements that influenced her level of awareness. The media plays a crucial role in providing caregivers with information about child safety. Only 38% said they gained information from doctors and other medical professionals.

In Malaysia, (Nadeeya et al., 2016) a study was conducted and revealed that mothers showed poor knowledge on few specific knowledge items. Only 20.2 percent of mothers decided to learn cardiopulmonary resuscitation for children, 24.0 percent had precise knowledge of the use of a baby walker, 27.2 percent knew the potential for vitamins to cause child poisoning at home, 34.8 percent knew the appropriate age for children to bathe alone, 47 percent had precise knowledge of the use of a hammock, and 48 percent told the danger of having exposed electrical sockets.

5. CONCLUSION

The present study revealed that most of the mother had a poor knowledge regarding home accidents prevention and first aids. According to the study, more than half of mother has a falling accident occur to their children and kitchen is the most places to accident occurrence. To increase mothers' knowledge and perceptions about preventing child injury at home, first aid training and general education about safe home environments should be made available to them. Because most of these injuries happen at home, it's important to improve safety and injury prevention while lowering risks.

Ethical consideration

This study was approved by the Ethics Committee of King Fahad medical city Hospital IRB H-01-R-012 IRB log No: IRB00010471. Before filling the survey there was a statement that declares that participant's secrecy and privacy were guaranteed. Submission of a complete answered survey was considered as an agreement to share in the study.

Author's contribution

All the authors contributed in the selection of the idea, proposal writing, data collection, data entry and analysis, results and discussion writing and final revision of the article.

Acknowledgements

We thank all the physicians who responded to our questionnaire and helped us to conduct this work.

Funding

This study has not received any external funding.

Conflict of Interest

The authors declare that there are no conflicts of interests.

Data and materials availability

All data associated with this study are presented in the paper.

REFERENCES AND NOTES

1. Abd El-Aty NS, Moftah FM, Ibrahim HD, Hassanen RH. Assessment of knowledge and practice of mothers towards home accidents among children under six years in Assiut governorate. *Auber J* 2005; 8(2):11–28.
2. Al-Zahrany MS, Al-Shuwair FN, Al-Zahrani MA, Temsah MH, Al-Sohime F, Al-Mosned BS, Al-Soliman MA, Abaalkhail MS. Self-reported Unintentional Injuries in Families Visiting the ‘Childhood Safety Campaign’ in Saudi Arabia. *Egyptian J Hosp Med* 2018; 71(1):2280–6.
3. Azizi BH, Zulkifli HI, Kassim MS. Circumstances Surrounding Accidental Poisoning in Children. *Med J Malaysia* 1994; 49(2): 132–7.
4. Debnath, M, Reang, T, Tripura. A Study To Assess the Knowledge of Rural Mothers Regarding Common Domestic Childhood Injuries and Home-Safety Measures Adopted By Them in West District of Tripura, India. *JEMDS* 2014; 3(20), 5522–5528.
5. Gulliver P, Dow N, Simpson J. The epidemiology of home injuries to children under five years in New Zealand. *Aust N Z J* 2005; 29(1):29–34.
6. <https://www.who.int/news-room/fact-sheets/detail/injuries-and-violence>
7. Ibrahim A. Assessment of knowledge, attitude and practice of mothers attending Cairo University Hospital toward home accidents among preschool children. Cairo, Egypt, Higher Institute of Nursing, University of Cairo; MSc thesis 1991.
8. İnce, Tolga, Songül Yalçın, and Kadriye Yurdakök. Parents’ Attitudes and Adherence to Unintentional Injury Prevention Measures in Ankara, Turkey. *Balk Med J* 2017; 34(4), 335.
9. Mack, K, Dellinger, West B. Adult opinions about the age at which children can be left home, bathe, or bike alone, Injury Control and Risk Survey (ICARIS). *J Safety Res* 2012; 18 (1): A100–A100.
10. Mahalakshmy T, Dongre AR, Kalaiselvan G. Epidemiology of childhood injuries in rural Pondicherry, South India. *Indian J Pediatr* 2011; 78:821–825.
11. Nadeeya MN, Rosnah S, Zairina AR, Shamsuddin K. Knowledge and perception towards home injury in children and safety measures among Malaysian urban mothers. *Ijphcs* 2016; 3(2), 100–113
12. National Safe Kids Campaign; 2021. http://www.achd.net/injury/pubs/pdf/KidsSafety_pamphlet.pdf, accessed.
13. Okony, Helen Achwany. Mother Knowledge toward First Aid and Prevention of Common Home Accidents among Children Under Five Years in Al-Andolos Area. Shendi University journal 2017.
14. Olutayo, Oladunjoye Grace. Mother’s Education, Age and Knowledge about Home Accident Prevention among Preschool Children in Ilesha Metropolitan City. *Journal of Education and Practice : A Relational approach* 2013; 4(11), 221–228
15. Porter, TR, Crane, LA, Dickinson, LM, Gannon, J, Drisko, DiGuseppi. Parent opinions about the appropriate ages at which adult supervision is unnecessary for bathing, street crossing, and bicycling. *Archives of Int J Pediatr Adolesc Med* 2007; 161: 656–662.
16. RSH, Eldosok. Home-related injuries among children: knowledge, attitudes and practice about first aid among rural mothers. *EMHJ* 2012; 18 (10), 1021–1027
17. Santagati G, Vezzosi L, Angelillo IF. Unintentional injuries in children up to six years of age and related parental knowledge, attitudes, and behaviors in Italy. *J Pediatr* 2016; 177, 267–272
18. Spencer SP, Shields BJ, Smith GA. Childhood Bathtub-Related Injuries: Slip and Fall Prevalence and Prevention. *IJCP* 2005; 44: 311.
19. Thein MM, Lee BW, Bun PY. Knowledge, attitude and practices of childhood injuries and their prevention by primary caregivers in Singapore. *SMJ* 2005; 46(3):122.
20. World Health Organization. Violence, Injuries, and Disability; 2008
21. World Health Organization: Violence and Injury Prevention; 2021